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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,164	04/25/2002	Albert Modi	MODL3004/JEK	4359

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EXAMINER
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NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/030,164	MODL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Andrew L. Nalven	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>25 April 2005</u> .                                                       | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 7 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The cited claim is directed towards the storage of the reference data, in this case biometric data, as a hash value and the forming of a hash value from redetected biometric data. Examiner has interpreted the result of this limitation to be that the comparison of reference biometric data with the redetected biometric data will occur by comparison of the two hash values. Examiner contends that the specification is not enabling for such a comparison. Examiner fails to ascertain how one of skill in the art could utilize the instant specification to create a comparison function using two hash values that produces threshold values for use in authentication.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-6, 9 and 15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Regarding claims 5-6 and 9, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
4. Regarding claims 15-16, the cited claims provide the limitation "the message" referring to parent claim 8. Parent claim 8 provides two messages; one message for a positive authentication and one for a negative authentication. It is unclear which message the cited claims are referring to. Examiner has interpreted the message to be referring to the message received based upon a negative authentication.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 5-6, 9-13, 15-16, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Seal et al US Patent No. 6,549,118.

6. With regards to claims 1, 8, and 18, Seal teaches a comparison is performed for a match between a person's biometric data stored as reference data and the person's redetected biometric data (Seal, column 4 line 64 – column 5 line 4) and authentication is effected if the match is equal to or greater than a predetermined threshold value (Seal, column 5 lines 14-26) characterized in that authentication is refused if the comparison yields a match of the redetected biometric data with the stored reference data which is equal to or greater than a predetermined second threshold value (Seal, column 5 line 47 – column 6 line 12).

7. With regards to claims 2, 10, Seal teaches the second threshold being a 100% match (Seal, column 5 lines 42-47, exact match).

8. With regards to claim 3, Seal teaches the biometric data detected in different authentication processes are collected and stored as data records and authentication is refused if the redetected biometric data of a current authentication process have a match higher than the predetermined second threshold value in comparison to one of the stored data records (Seal, column 5 lines 41-60).

9. With regards to claims 5-6, 9, 11, Seal teaches the reference data and optionally the data records are stored on a data carrier, particular a smart card (Seal, column 4 lines 15-37, server authentication apparatus has disk drive storage).

10. With regards to claims 12-13, Seal teaches further memory areas in the form of a stack and shift registers (Seal, column 4 lines 25-32, processors with main memory use stacks and shift registers when processing and loading data).

11. With regards to claim 15 (as best understood), Seal teaches the apparatus is automatically disabled if the message is present (Seal, column 5 lines 42-47, process terminates).

12. With regards to claim 16 (as best understood), Seal teaches the issuing of an error message if the message is present (Seal, column 5 lines 42-47).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seal et al US Patent No. 6,549,118.

14. With regards to claims 4 and 14, Seal fails to specifically teach a 99% data match being the second threshold; however Seal teaches the step of determining if a data match is too similar (Seal, column 6 lines 4-6 "too similar") and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a 99% data match because it offers the advantage of preventing an unauthorized user from intercepting, copying, and reusing biometric data in an effort to fool an authentication system (Seal, column 5 lines 48-60).

15. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seal et al US Patent No. 6,549,118 in view of Schneier et al US Patent No. 5,768,382.

16. With regards to claim 7, Seal fails to teach a hash value being formed from the redetected biometric data and the stored reference data being a hash value. Schneier teaches a hash value being formed from the redetected biometric data and the stored reference data being a hash value (Schneier, column 15 lines 11-36). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Schneier's method of hashing biometric data with Seal's authentication system because it offers the advantage of providing continuous authentication that ensures that a user is who he/she purports to be (Schneier, column 15 lines 11-25).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 571 272 3838. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2134

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Nalven



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